



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240



Honorable Joseph Westphal
Assistant Secretary of the Army (Civil Works)
Department of the Army
108 Pentagon
Washington, D.C. 20310-0108

APR - 5 1999

Dear Dr. Westphal:

In accordance with the provisions of the Section 404(q) Memorandum of Agreement between the Department of the Interior and the Department of the Army (pursuant to the Clean Water Act at 33 U.S.C. 1344 *et seq.* and as revised on December 21, 1992), I am requesting your review of the U.S. Army Corps of Engineers, Alaska District Engineer's decision to authorize British Petroleum Exploration, Alaska to develop the proposed Northstar oil and gas unit (Public Notice No. N-950372, Beaufort Sea 441). The proposed project would be the first offshore development in Alaska's Beaufort Sea without a causeway to shore and the first to transport oil via a buried subsea pipeline in the entire Arctic. The project would establish design precedents for subsequent offshore development. The Department of the Interior has determined that the proposed project will result in unacceptable risks to fish and wildlife resources which depend on the lagoons and nearshore habitats in the project area.

The applicant has proposed to minimize potential impacts from the project by engineering the pipeline to reduce the risk of a spill, and by agreeing to many of the stipulations proposed by Federal and State agencies. The Department believes that the potential project impacts can be further minimized by routing the entire offshore pipeline seaward of the barrier islands. Compensatory mitigation has not been proposed, nor is it practicable. Therefore, avoidance and minimization are the only options available to offset potential impacts, including secondary and cumulative impacts of an oil spill.

On March 29, 1999, the U.S. Fish and Wildlife Service's Alaska Regional Office received a Notice of Intent to issue the above-referenced permit. After a thorough review of background information on the project, the Department has determined that this case warrants elevation in accordance with the criteria found in Part IV of the revised Section 404(q) MOA (Elevation of Individual Permit Decisions). Specifically, the Department has concluded that the proposed project will have substantial and unacceptable adverse impacts on aquatic resources of national importance.

The District Engineer's proposed permit decision could lead to substantial direct and cumulative adverse impacts to marine mammals, waterfowl, shorebirds, and fish. The Department of the Interior, acting through the Service, is vested with the authority and obligation to protect, conserve, and enhance the Nation's fish and wildlife resources. These matters fall within our jurisdiction under the Fish and Wildlife Coordination Act (48 Stat. 401; 16 U.S.C. 661 *et seq.*),

Enclosure

Section 404(m) of the Clean Water Act (62 Stat. 1155; 33 U.S.C. 1251-1376), the Fish and Wildlife Act of 1956 (70 Stat. 1119; 16 U.S.C. 742), the Migratory Bird Treaty Act (40 Stat. 755; 16 U.S.C. 703-712), the Marine Mammal Protection Act (86 Stat. 1027; 16 U.S.C. 1361-1407), as amended, and the Endangered Species Act of 1973 (87 Stat. 844; 16 U.S.C. 1531-1544), as amended.

The District Engineer proposes to permit the applicant to route the subsea portion of pipeline directly through Gwydyr Bay/Simpson Lagoon, a shallow water system that provides habitat for large numbers of migratory waterfowl, shorebirds, and anadromous fish. Offshore habitats also support fish and wildlife, but at lower numbers and diversity than the nearshore areas. Nearshore coastal habitats are characterized by abundant invertebrates which are the dominant foods for both fish and migratory birds (National Research Council 1994). A primary concern in the Beaufort Sea is the potential effects of oil and gas development on the nearshore zone where Arctic cod, fourhorn sculpin, Arctic and least cisco, Dolly Varden, and other anadromous fish species feed, migrate and gain access to freshwater overwintering sites. The use of nearshore areas by migratory birds is also considerable. In a study sponsored by the Minerals Management Service, the National Research Council (1994:101) concluded that "nearshore waters...are critically important habitats for migrating waterfowl, as are their shorelines for shorebirds. Birds in these areas are particularly vulnerable [to oil spills and disturbance] because they need to acquire food rapidly for successful completion of migration or because they are molting and can be flightless."

The Final Environmental Impact Statement (pp. 8-79) concluded that an oil spill in the nearshore areas could result in the mortality of tens of thousands of birds depending on the timing, size, location and persistence of the spill. Up to 50,000 oldsquaw ducks molt during mid-July through August in Simpson Lagoon. Up to 1,600 black brant use coastal saline tundra in the area potentially affected by a spill. The threatened spectacled eider also uses nearshore habitats during spring migration, post-breeding migration, and fall migration. Common eiders, and red and red-necked phalaropes also use nearshore habitats, along with other migratory birds, and would be at risk in the event of a spill. Spills occurring during the open water period have the greatest potential to cause direct mortality, but spills at any time of year can cause long-lasting impacts to the invertebrate food base and habitats with consequent impacts on migratory species.

Polar bears are wide-ranging and can occur throughout the project area. The Final EIS concludes that up to 30 polar bears could be killed in the event of an oil spill. As we expressed in our final rule on the incidental take of polar bears and Pacific walrus from oil and gas operations in the Beaufort Sea (64 Federal Register 4328, 4220; January 28, 1999), the Fish and Wildlife Service emphasizes that any discussion about the suitability of different subsea pipeline alternatives remains subject to final Department of the Interior approval of Incidental Take Regulations under Section 101(a)(5) of the Marine Mammal Protection Act. Approval of new regulations requires a finding of negligible impact on marine mammal species or stocks and a finding that any take will not have an unmitigable adverse impact on the availability of such species or stocks for subsistence take for all oil and gas activities in the region. The Department has not yet made

these findings for subsea pipeline construction and use. Preparation of these findings will require additional analyses of oil spill probabilities discussed in the Final EIS for the Northstar project and other proposed projects such as Liberty and Sandpiper.

Because of the lack of precedent and because of the challenges presented by the offshore Arctic marine environment, there is considerable uncertainty associated with assessing the oil spill risks for the proposed project. The applicant's preferred alternative (Alternative 2) includes a 6-mile offshore pipeline which routes approximately 4 miles offshore of the barrier islands and 2 miles within Gwydyr Bay/Simpson Lagoon. Alternative 5, identified as the Environmentally Preferred Alternative in the Final EIS by the U.S. Army Corps of Engineers, Fish and Wildlife Service, Environmental Protection Agency, and the National Marine Fisheries Service, would route the offshore buried pipeline entirely seaward of the barrier islands with a landfall on the man-made West Dock causeway. The selection of Alternative 5 is justified and warranted because:

- routing the pipeline offshore of the barrier islands significantly reduces the potential for an oil spill directly in Gwydyr Bay/Simpson Lagoon, and provides additional response time to contain a spill before it contaminates nearshore habitats, including coastal marshes and shorelines;
- risk of pipeline failure due to permafrost thaw subsidence and shoreline erosion are eliminated under Alternative 5 by routing the pipeline in a corridor likely free of near-surface subsea permafrost and by placing the landfall on a stable structure (West Dock);
- offshore oil spill response and recovery will be improved under Alternative 5 since response equipment will be staged on West Dock. In addition, spill response offshore of the barrier islands will occur in deeper water, thus allowing the use of larger and more efficient spill recovery equipment compared to the smaller equipment required in the shallow waters (0-5 feet) of Simpson Lagoon;
- Alternative 5 reduces oil spill response time, improves leak detection, and reduces access-related damage related to oil spill response and unplanned maintenance of onshore pipelines; and
- onshore pipelines under Alternative 5 can be consolidated into existing pipeline corridors for most of their length, eliminating the need for 6.5 miles of new pipeline in currently undisturbed tundra.

In addition to the advantages of Alternative 5 described above, several of the disadvantages identified by the applicant could be eliminated by modifying Alternative 5 to route the pipeline directly from Seal Island to West Dock (the proposed Alternative 5 routes the pipeline first to the outer edge of the barrier islands, then to West Dock, resulting in two angles in the pipeline). A straight-line route would eliminate the engineering concerns with an angled pipeline, avoid the

potential water current and ice forces along the barrier islands, reduce the overall pipeline length from 9 to 7 miles (only 1 mile longer than the Alternative 2 pipeline), and reduce the maximum spill volume from 5200 barrels to 4100 barrels (compared to 3600 barrels under Alternative 2).

Because the amount of dredge and fill material is positively correlated with pipeline length, Alternative 2 would require 264,000 cy compared to 378,000 cy for Alternative 5. However, dredging and filling associated with the subsea pipeline would result in only temporary disturbance of the benthic invertebrates within and near the pipeline trench and a temporary decrease of water quality (FEIS:6-25 to 6-26). Because pipeline installation would occur during winter, impacts to anadromous fish and migratory birds will likely be negligible. Alternative 5 also requires an additional 300,000 cy of gravel fill to widen the west side of the West Dock causeway by approximately 50 ft for approximately 0.9 mi. While this would cause approximately 5.5 acres of the shallow, previously disturbed seafloor adjacent to the causeway to be covered, the Service believes that increased fill adjacent to the causeway is a minor impact (Final EIS:11-17).

The project as proposed is unacceptable to the Department of Interior. A viable alternative exists which would further minimize risk to fish and wildlife resulting from an oil spill. The concerns expressed by the applicant (e.g., spill risk, spill response capabilities) about routing the pipeline offshore of the barrier islands under Alternative 5 also apply to 4 miles of the pipeline route under Alternative 2. The engineering and planning required for construction and operation of 4 miles of the Alternative 2 subsea pipeline are identical to what would be required for the 7 to 9 miles of pipeline seaward of the barrier islands under Alternative 5. We are encouraged that BPXA intends to comply with many of the stipulations proposed by the various permitting agencies, but continue to believe that potential impacts can be further avoided or minimized by selection of Alternative 5 or a Modified Alternative 5 as the action alternative.

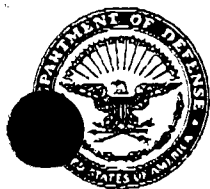
Enclosed is additional information addressing these and other issues relative to the proposed permit decision. Please do not hesitate to contact us if you have any questions.

Sincerely,

A handwritten signature in black ink that reads "Donald J. Barry". The signature is fluid and cursive, with the first name "Donald" being the most prominent part.

Assistant Secretary for Fish
and Wildlife and Parks

Enclosure



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
CIVIL WORKS
108 ARMY PENTAGON
WASHINGTON DC 20310-0108
29 APR 1999

REPLY TO
ATTENTION OF

Honorable Donald Barry
Assistant Secretary for Fish
and Wildlife and Parks
United States Department of the Interior
Washington, D. C. 20240

Dear Mr. Barry:

This is in reply to your letter of April 5, 1999, requesting that I review the proposed decision on the Army Corps of Engineers Alaska District Department of the Army permit to British Petroleum Exploration (Alaska) Incorporated (BPXA). Because your request was made pursuant to our Section 404(q) Memorandum of Agreement, my staff carefully reviewed the concerns raised in your letter, the District's decision documents and draft permit, information provided by the State of Alaska, and information from the applicant. The review also included information gathered during a meeting with representatives from the State of Alaska, BPXA, and the Corps of Engineers and a subsequent meeting with representatives of the U.S. Fish and Wildlife Service (FWS) and the Corps of Engineers. Additionally, follow-up conference calls were held with BPXA, the State of Alaska, and the FWS to ask questions and to clarify our understanding of the information presented at the individual meetings.

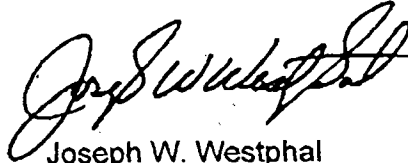
While the nearshore area of the Beaufort Sea (specifically Gwydry Bay and Simpson Lagoon) may qualify as an aquatic resource of national importance, we disagree that substantial and unacceptable adverse impacts to the aquatic environment will result with the implementation of the District Engineer's decision to authorize Alternative #2. We considered all of the information presented that was relative to the environmental effects of Alternative #2, Alternative #5 and a Modified Alternative #5 and have concluded that Alternative #2 will have less overall environmental effect on the aquatic ecosystem. Additionally, the full implementation of the twenty-four Special Conditions that will be included as part of the Department of the Army Permit and the 146 specific stipulations imposed on the State of Alaska approvals will also serve to provide protection to the aquatic resource.

In light of these findings, additional review pursuant to the Memorandum of Agreement is not warranted and the District will be allowed to proceed with issuance of the permit. Although we have not agreed to subject this proposed permit to further Corps review, we believe there has been value added to the process through your raising this case to our attention. The face-to-face meetings resulted in a better understanding at the Headquarters and field level about sources of disagreement on the North Slope of Alaska and in the Beaufort Sea and how those may be resolved.

(Enc 1)

Please do not hesitate to contact me if I can be of further assistance. Should your staff have any questions or comments concerning our decision in this case, please contact me or Mr. Chip Smith, Assistant for Environment and Regulatory Affairs, at (703) 693-3655.

Sincerely,

A handwritten signature in black ink, appearing to read "Joseph W. Westphal". The signature is fluid and cursive, with the first name "Joseph" being the most prominent.

Joseph W. Westphal
Assistant Secretary of the Army
(Civil Works)



DEPARTMENT OF THE ARMY

U.S. Army Corps of Engineers
WASHINGTON, D.C. 20314-1000

REPLY TO
ATTENTION OF:

03 MAY 1999

CECW-OR

MEMORANDUM THRU COMMANDER, PACIFIC OCEAN DIVISION


FOR COMMANDER, ALASKA DISTRICT

SUBJECT: Department of the Interior, Section 404(q) Elevation of a Section 10/404/103 Permit Decision, Alaska District Permit No. N-950372, Beaufort Sea No. 441

1. On 29 April 1999, the Assistant Secretary of the Army (Civil Works) (ASA (CW)) sent a letter to the Department of the Interior indicating the subject permit case will not be elevated and that the U.S. Army Corps of Engineers Alaska District Engineer may proceed with the final decision. Enclosed are copies of the letters signed by the ASA (CW).
2. In accordance with Part IV(g)(1) of the Memoranda of Agreement with Department of the Interior, the District may proceed to issue the subject permit. The review of this case indicated the District's decision was made in accordance with all applicable policies and regulations.
3. The Corps and the ASA(CW) thank the District for the quality of the documentation they provided and their extensive coordination during our consideration of this case. Case-by-case decision making is difficult when the use of nationally important aquatic resources, such as the nearshore area of the Beaufort Sea (specifically Gwydry Bay and Simpson Lagoon), are being discussed. The District is to be commended for the dedication of its staff and their efforts to improve the protection of Alaska's aquatic resources, while providing quality service to the regulated public.
4. Should you have any questions or comments concerning our decision, please do not hesitate to contact Mr. Mike Smith, Program Manager, Regulatory Branch, at (202) 761-0201.

FOR THE COMMANDER:

2 Encls


RUSSELL L. FUHRMAN
Major General, USA
Director of Civil Works